

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An apparatus ~~A message broker~~ for managing subscription requests in a multicast messaging system comprising a plurality of publishers publishing information to a [[the]] broker and a plurality of subscribers subscribing to information received from one or more publishers, the apparatus ~~broker~~ comprising:

means for a computer, wherein the computer comprises:

a matching engine, wherein the matching engine receives receiving a  
subscription request pointing to topic information in which a [[the]] requesting subscriber is  
interested, the topic information defining a specific topic within a topic hierarchy, means for  
parsing parses the [[said]] subscription request to determine if the [[said]] request includes a  
wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a  
remainder, wherein the prefix comprises everything in the topic string preceding the wildcard,  
locates a node in the topic tree defined by the prefix, wherein the node represents a topic  
immediately preceding the wildcard, and means, responsive to determining that the [[said]]  
request does include a wildcard, for instructions instructs the requesting subscriber to listen on a  
multicast address associated with the topic in the topic hierarchy which precedes the [[said]]  
wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined  
by the prefix.

2. (Currently Amended) The apparatus [[message broker]] of claim 1 comprising:

means for assigning the multicast address to the topic in the topic hierarchy which precedes the  
wildcard said preceding topic.

3. (Currently Amended) The apparatus [[message broker]] of claim 2, wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard [[preceding topic]] is inherited from parent topic information

4. (Currently Amended) A computer implemented method for managing subscription requests in a multicast messaging system, the messaging system comprising a plurality of publishers publishing information to a broker and a plurality of subscribers subscribing to information received from one or more publishers, the method comprising the steps of:

receiving a subscription request pointing to topic information in which a [[the]] requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

parsing the subscription [[said]] request to determine if the [[said]] request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard; and

locating a node in the topic tree defined by the prefix, wherein the node represents a topic immediately preceding the wildcard; and

responsive to determining that said request does include a wildcard, for instructing the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the [[said]] wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix.

5. (Currently Amended) The computer implemented method of claim 4 comprising:

assigning the multicast address to the topic in the topic hierarchy which precedes the wildcard said preceding topic.

6. (Currently Amended) The computer implemented method of claim 5 wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard preceding topic is inherited from parent topic information.

7. (Currently Amended) A computer program embedded on a computer readable medium comprising program code adapted to perform, [[for]] managing subscription requests in a multicast messaging system when said program code is run on a computer, the messaging system comprising a plurality of publishers publishing information to a broker and a plurality of subscribers subscribing to information received from one or more publishers, the computer program comprising program code means adapted to perform, when said program is run on a computer, the steps of:

receiving a subscription request pointing to topic information in which a [[the]] requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

parsing the subscription [[said]] request to determine if the [[said]] request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard;

locating a node in the topic tree defined by the prefix, wherein the node represents a topic immediately preceding the wildcard; and

~~responsive to determining that said request does include a wildcard, for instructing the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the [[said]] wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix.~~

8. (Currently Amended) The computer program of claim 7, wherein the program code means is also adapted to perform the following step when said program is run on a computer:

assigning the multicast address to the topic in the topic hierarchy which precedes the wildcard said preceding topic.

9. (Currently Amended) The computer program of claim 8, wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard preceding topic is inherited from parent topic information.

10. (Currently Amended) A data processing system for managing a multicast messaging system for managing subscription requests, the data processing system comprising:

a bus;

a memory connected to the bus, wherein the memory includes computer program code;  
and

a processor coupled to the bus, wherein the processor executes the computer program code to a message broker; a plurality of publishers publishing information to the message broker;

a plurality of subscribers subscribing to information received from one or more publishers, the subscribers comprising:

means for registering subscription requests with the broker, the message broker, the message broker comprising:

a matching engine, wherein the matching engine receives means for receiving a subscription request pointing to topic information in which a [[the]] requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

a parser, wherein the parser parses means for parsing the [[said]] subscription request to determine if the [[said]] request includes a wildcard, wherein a topic string received as the [[said]] subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard and, wherein the parser locates a node in the topic tree defined in the prefix, wherein the node represents a topic immediately preceding the wildcard; and

~~means, responsive to determining that said request does include a wildcard, an instructor, wherein the instructor instructs the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the [[said]] wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix.~~